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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,173

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Robert Burgler

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11/12/2008

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CANADA

EXAMINER

JOHNSON, VICKY A

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,173	<b>Applicant(s)</b> BURGLER, ROBERT	
	<b>Examiner</b> Vicky A. Johnson	<b>Art Unit</b> 3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 19, 2008 has been entered.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the material aggregate an extending parallel to the longitudinal axis of the hub must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

Art Unit: 3656

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claim 12 is objected to because of the following informalities: The use of "first" and "second" with respect to the subsections should be added to the claims to designate proper antecedent basis. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 is indefinite because it is unclear which element is the "recess", since the claim indirectly depends from claim 7 which requires two subsections of the insertion area as shown in Figure 2. The drawings only show a recess with respect to Figures 5 and 6, which do not have two subsections as defined in the claims.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3656

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-6, 8 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Matt (US 5,307,708).

Matt discloses a press-fitted hub system comprising: a base body (1) formed as a shaft and having at least one region of material aggregate (7) adapted to have a diameter larger than the diameter of shaft (see Fig 4); and at least one hub (2) having a hub opening in a front face (5) for pressing onto the base body (see Fig 6), whereby the hub opening has an insertion area tapering in a press-on direction (see Fig 6), a first cylindrical section (unnumbered first portion of the 6, even though the portion is part of the tapered section the limitations do not preclude it, see Fig 3) arranged as viewed between the front face and insertion area (see Fig 3), and a second cylindrical section (unnumbered portion after tapered portion, see Fig 6) arranged on the opposite side of the insertion area with reference to the first cylindrical section; wherein the diameter of the first cylindrical section of the hub opening is at least the same size as the largest diameter of the base body on which the hub is to be pressed (see Fig 6), wherein the insertion area is tapered in a press-on direction(see Fig 3), and the diameter of the first cylindrical section is greater than the diameter of the second cylindrical section (see Fig 3), a friction connection between the hub and base body (see Fig 7), the material aggregate consists of coils and bars (see Fig 4), the insertion area has a curved profile (see Fig 2).

Art Unit: 3656

Re claim 6, the insertion area is formed by a truncated cone, which connects the first and second cylindrical sections by means of transition edges (see Fig 3)

Re claim 8, the diameter of the second cylindrical section is at least the same size as the diameter of the base body (see Fig 6).

8. Claims 1-8 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Leuthold (US 6,502,538).

Leuthold discloses a press-fitted hub system comprising: a base body (1) formed as a shaft and having at least one region of material aggregate (3) adapted to have a diameter larger than the diameter of shaft (see Fig 3); and at least one hub (2) having a hub opening in a front face for pressing onto the base body (see Fig 3), whereby the hub opening has an insertion area tapering in a press-on direction (see Fig 6), a first cylindrical section (unnumbered first portion of 7, even though the portion is part of the tapered section the limitations do not preclude it, see Fig 6) arranged as viewed between the front face and insertion area (see Fig 6), and a second cylindrical section (unnumbered portion after tapered portion, see Fig 5) arranged on the opposite side of the insertion area with reference to the first cylindrical section; wherein the diameter of the first cylindrical section of the hub opening is at least the same size as the largest diameter of the base body on which the hub is to be pressed (see Fig 3), wherein the insertion area is tapered in a press-on direction (see Fig 6), and the diameter of the first cylindrical section is greater than the diameter of the second cylindrical section (see Fig 6), a friction connection between the hub and base body (see Fig 3), the material

Art Unit: 3656

aggregate consists of coils and bars (see Fig 3), the insertion area has a curved profile (see Fig 2).

Re claim 6, the insertion area is formed by a truncated cone, which connects the first and second cylindrical sections by means of transition edges (see Fig 6).

Re claim 7, the insertion area is divided into two subsections (6, 7) and both subsections of the insertion area are formed in the shape of a truncated cone along the longitudinal axis (see Fig 5), and each having a cone angle different from the other, and that the cone angle of the first subsection arranged toward the first cylindrical section is greater than the cone angle of the second subsection arranged toward the second cylindrical section (see Fig 6).

Re claim 8, the diameter of the second cylindrical section is at least the same size as the diameter of the base body (see Fig 3).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9-14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leuthold (US 6,502,538).

Leuthold discloses the device as described above, but does not disclose the distance of the point for a first contact between the greatest outer diameter of the base

Art Unit: 3656

body and the insertion area is arranged at least 5% to 15% of the entire length of the hub from the front face, the length of the first cylindrical section being 2% to 30% of the entire length of the hub, the length of the second cylindrical section being 2% to 30% of the entire length of the hub, the length of the insertion area including 40% to 96% of the entire length of the hub, and the ratio of length of the first subsection to the second subsection lies between 0.1 and 10.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to determine to the optimum range of the point of first contact, the length of the first cylindrical section, the length of the second cylindrical section, and the ratio of length of the insertion area, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. See MPEP 2144.05

Re claim 13, the first conical angle is 10.degree. to 30.degree (col. 1 lines 53-56).

Re claim 14, the second conical angle is 1.degree. to 15.degree (col. 1 lines 53-56).

Re claim 16, further comprising at least one cam (2).

Re claim 17, comprising a camshaft including a cam (2) and hub, wherein the base body (1) is a shaft on which the cam is pressed (see Fig 3).



***Response to Arguments***

Some further comments regarding the applicant's arguments are deemed appropriate.

The applicant argues that no specific description has been give with regard to the "first cylindrical section." The first cylindrical section of the Matt reference, as discussed above, is the first portion of the tapered section. The limitation only recites that the first cylindrical section be cylindrical and that it be located between the front face and the tapered section.

With respect to the argument that the Matt reference fails to teach the material aggregate "being parallel with the longitudinal axis of the hub" is not understood. Claim 3 recites, in part, "the material aggregate can extend either in the circumferential direction of the base body or parallel to the longitudinal axis of the hub." The Matt reference shows in Figure 6 the material aggregate extending in the circumferential direction of the base body.

Claims 4 and 5 are argued as not being anticipated by the Matt reference. Figure 2 shows that the insertion area has a curved profile. This limitation is broadly recited, and therefore interpreted broadly.

The arguments with respect to claims 7-14 are persuasive and therefore a new rejection is stated above.

Claim 15 has been determined to be indefinite and a new rejection is stated above.

The applicant's remarks have been given due consideration, however, they are not deemed fully persuasive.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (571) 272-7106. The examiner can normally be reached on Monday-Friday (7:00a-3:30p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vicky A. Johnson/  
Primary Examiner, Art Unit 3656

Application/Control Number: 10/517,173  
Art Unit: 3656

Page 10